

(21) Application No 9116507.6

(22) Date of filing 31.07.1991

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(51) INT CL⁵
A47B 96/14

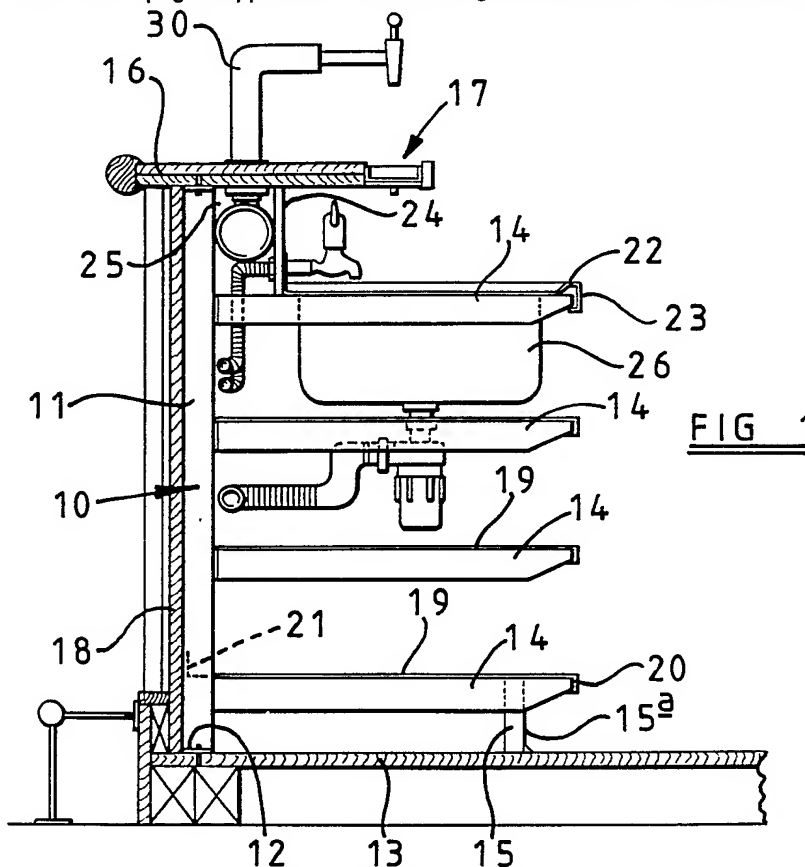
(52) UK CL (Edition L)
A4B B7A1 B7CX B7D B7E6

(56) Documents cited
GB 2214413 A GB 1023074 A US 3527353 A

(58) Field of search
 UK CL (Edition K) **A4B**
 INT CL⁵ **A47B**

(54) **A counter and shelving system**

(57) A counter and shelving system comprises a number of spaced parallel upright stainless steel posts 11 each having a number of vertically spaced horizontal stainless steel support beams 14 welded at one end to the post and extending away from it in cantilever fashion. Various types of shelf structure 19 are provided each of which extends between a pair of corresponding cantilever support beams 14 and provides a storage or working surface, or carries built-in equipment, such as a sink 26 or ice-box 27. A countertop 16 is mounted across the tops of the posts 11. The posts may be spaced apart in any required arrangement to provide a structure which fits exactly within the space available, and since the support beams are cantilevered there may be no other upright supports to inhibit cleaning or free access to the shelves and equipment.



At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1990.

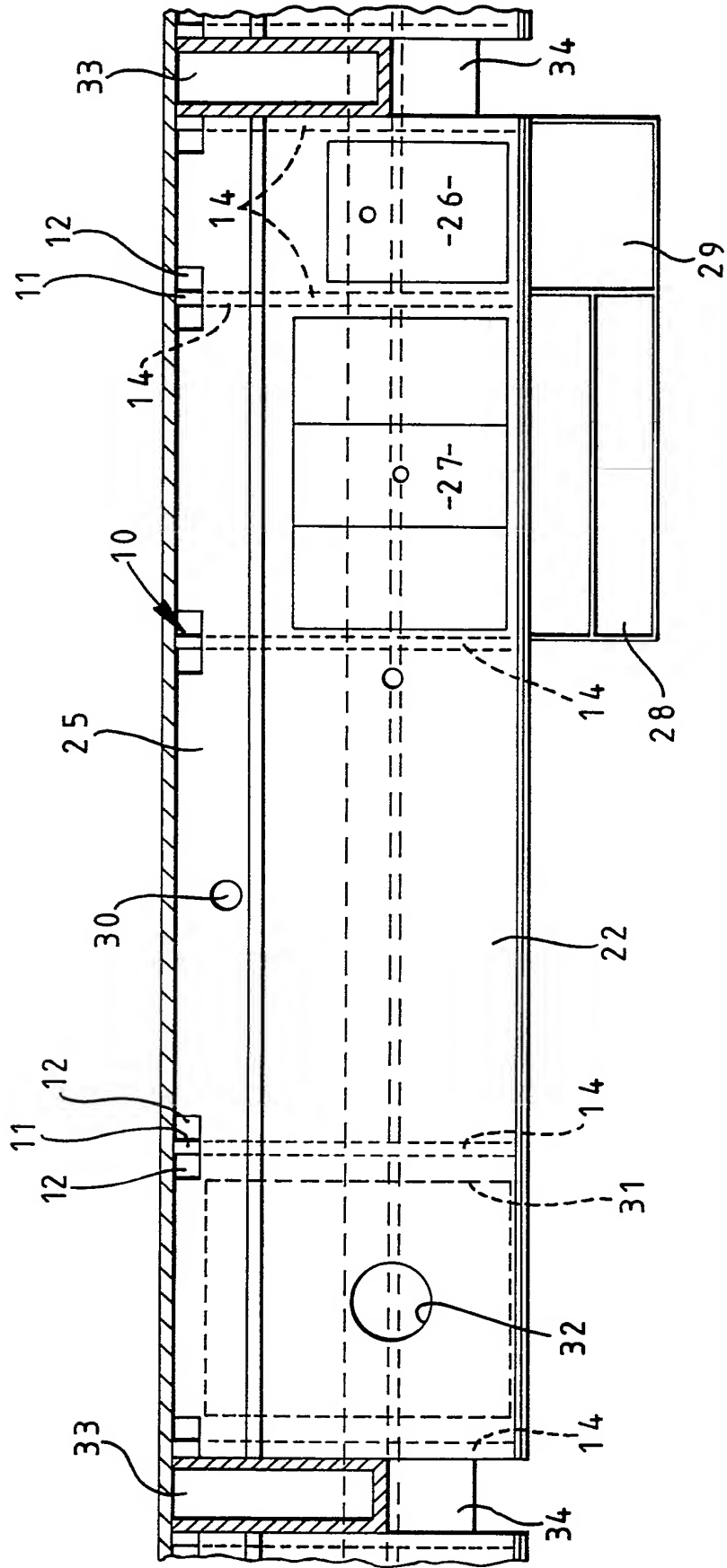
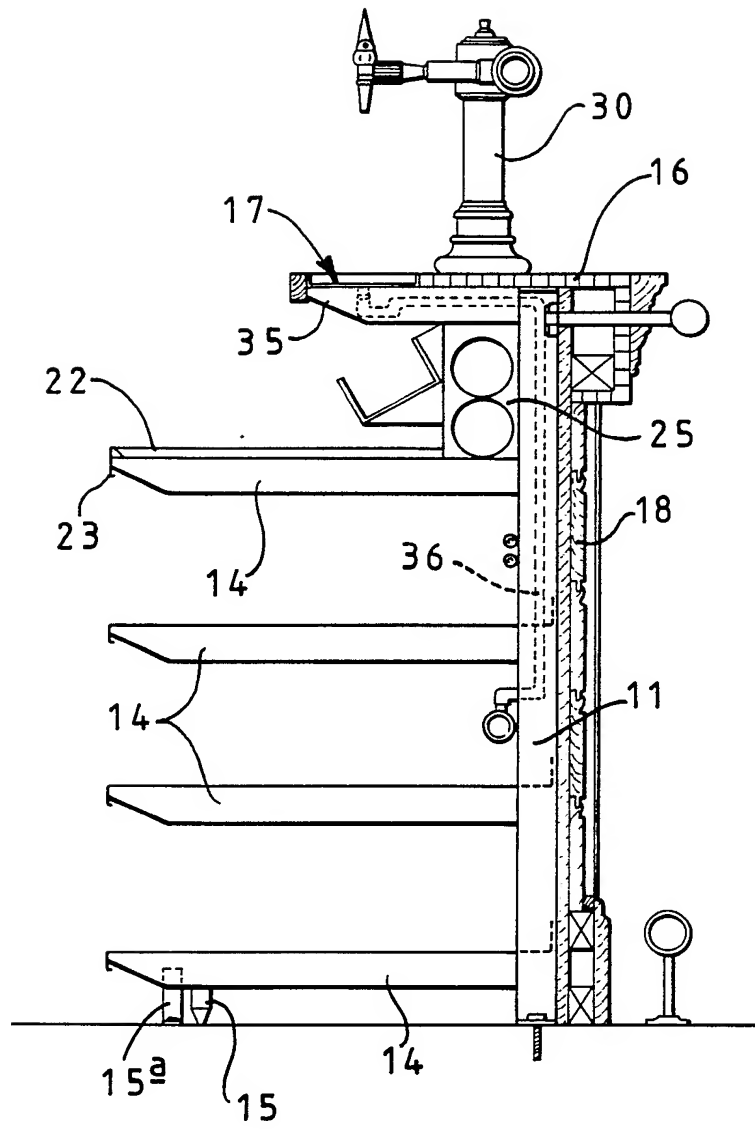


FIG 3



-1-

"A Counter and Shelving System"

The invention relates to counter and shelving systems. It is particularly applicable to the construction of bar systems for use in public houses, wine
5 bars and similar catering establishments, but the system is also suitable for use in other situations where it is necessary to provide shelving and equipment behind a serving counter.

The requirements for shelving and equipment
10 arrangement behind a serving bar or counter vary considerably from user to user, according to the nature of the products being served at the counter, the constraints of space, and the preferences of the user. Accordingly, it is common for commercially available systems to
15 comprise a range of optional modules which can be assembled together in different combinations to suite individual requirements. Such modules are normally free standing, being supported on four or more legs. For example, one module might comprise a rectangular framework
20 carrying a range of flat shelves, while another module may incorporate a sink unit or a refrigerated compartment. However, such existing systems suffer from certain disadvantages.

For example, the user must normally choose from
25 a limited range of modules which are available, and although this may provide a certain amount of flexibility, it is often not possible to achieve a particular combination of modules which fits exactly into the space

available and provides exactly the arrangement which the user requires. Furthermore, since each module is complete in itself, there is a certain redundancy in the means for supporting the modules and providing each one with
5 adequate strength. Also, since each module is generally standing on four or more legs and has uprights extending along at least each corner thereof, this may make the modules difficult to clean and may inhibit free access to the shelves or other equipment supported on the module.

10 The present invention sets out to provide a novel and improved form of counter and shelving system which may overcome some or all of these disadvantages, as well as providing other advantages.

 According to the invention there is provided a
15 counter and shelving system comprising two or more spaced parallel posts each having means at its lower end for supporting it in an upright position on the floor, a plurality of support beams spaced one above another along the height of each post, each support beam being secured
20 at one end to the post and extending away from the post in cantilever fashion, each support beam on one post being at the same height as a corresponding support beam on an adjacent post, and one or more shelf structures being provided each of which extends between a pair of
25 corresponding cantilever support beams and is supported thereby.

 Since the basic support unit for the system comprises a post to which cantilever support beams are

secured, such units may be spaced apart in any required arrangement to provide a structure which, in overall size, fits exactly within the space available. Since the support beams are cantilevered to the posts, there may be
5 no upright supports, other than the posts themselves, to prevent free access to the shelf structures carried by the beams, and the equipment and items thereon, and also cleaning of these shelf structures and equipment is also facilitated.

10 The means for supporting each post may include a device for securing it rigidly to the floor. Alternatively or additionally, the supporting means may include a supporting leg extending downwardly to the floor from a position adjacent the free extremity of the
15 lowermost support beam on the post.

 Preferably the posts and support beams are formed from stainless steel, and the ends of the support beams are secured to the support posts by welding.

 One or more of the shelf structures may be
20 pressed from sheet metal, preferably stainless steel, and may comprise an upper surface and downwardly turned end flanges which hook over the support beams. The shelf structure may also include a downwardly turned front flange along the side of the shelf structure remote from
25 the posts, and/or an upwardly turned rear flange along the side thereof nearer the posts. The rear flange may be spaced from the posts to provide a space for the location of conduits, electric cables or the like.

The shelf structures may also incorporate other equipment, such as a sink, ice compartment, etc.

The system may also incorporate a countertop supported on the tops of the posts and/or on cantilever
5 support beams mounted at the upper ends of the posts. One or more fonts for dispensing beverages may be mounted on the countertop, which may also incorporate a drip tray.

The system may include facing panelling or the like extending across and between the posts on the
10 opposite side thereof to the cantilever support beams.

Other optional features of counter and shelving systems according to the present invention may be seen from the following description of preferred embodiments thereof.

15 The following is a more detailed description of embodiments of the invention, reference being made to the accompanying drawings in which:

Figure 1 is a vertical section through part of a typical counter and shelving system in accordance with the
20 invention;

Figure 2 is a similar vertical section through another part of the system;

Figure 3 is a plan view of the system; and

Figure 4 is a vertical section through part of
25 an alternative form of system in accordance with the invention.

Referring to Figures 1 to 3, there is shown a counter and shelving system in accordance with the

invention and suitable for use, for example, in a public house, wine bar or similar establishment. The system provides a countertop, behind and beneath which are provided an array of shelves and other fixtures and
5 fittings required for operation of the establishment.

The system is based on a number of cantilever support units 10 which are spaced apart along the length of the counter. Each support unit comprises a vertical post 11 which is formed at its lower end with flanges 12
10 which are secured to a floor surface 13 (in this case a raised floor surface). The flanges 12 may be screwed or bolted to the floor and preferably the fixing is sufficient to support the post rigidly in its vertical position.

15 A number of horizontal support beams 14 extend rearwardly away from the post 10 and are spaced one above another along the height of the post. Each support beam 14 is rigidly secured to the post 10 at its forward end so as to extend rearwardly from the post in cantilever
20 fashion.

Preferably the posts 10 and support beams 14 are rectangular box sections formed of stainless steel and the ends of the beams 14 may be welded, bolted, or secured by other means to the posts 10. The two central beams are
25 preferably adjustable to different vertical positions on the posts. For example, the uppermost and lowermost beams on each post may be welded to the post, and the two central beams may be provided at their ends with hook

devices which may be engaged with any of a series of apertures spaced apart along the height of the post, so that the vertical position of each support beam on the post may be adjusted.

5 Although, as previously mentioned, the mounting of the posts 10 on the floor 13 is preferably such as to support them rigidly in the vertical position, additional stability may be provided by short legs 15 which are mounted adjacent the rearward end of each lowermost beam
10 14. A vertical kickplate 15a extends across the support legs 15. The legs 15 may be adjustable in height, so that they may be adjusted according to any unevenness in the floor. The kickplate 15a is preferably removable for cleaning purposes, and a resilient seal is preferably
15 provided between the lower edge of the kickplate and the floor to prevent spilled liquids from seeping under the kickplate.

A horizontal countertop 16 is mounted across the upper ends of the posts 11 and is provided with a
20 conventional form of recessed drip rail 17. Flat facing panelling 18 is secured across and between the fronts of the posts 10. The panelling 18, and the aforementioned kickplate 15a, may be formed, for example, from stainless steel or from a washable plastics laminate.

25 The support beams 14 support various types of surface and equipment, as will now be described. Support units may be provided with the beams 14 at any required spacing and height on the posts 10, and any number and

spacing of support units can be provided, thus providing a very flexible system which may be adapted to meet the user's requirements.

Some of the support beams 14 may carry flat
5 stainless steel sheet shelves, as indicated at 19 in
Figures 1 and 2. The shelves are pressed from a single
sheet of stainless steel and comprise a rear downwardly
turned flange 20 which hooks over the free ends of the
support beams 14, and a front upwardly turned flange 21
10 which abuts against the facing panelling 18 and may be
secured thereto. The shelves may extend across a number
of support beams 14 along the length of the bar. The
ends of the shelves may be formed with downwardly turned
side flanges which hook over the beams 14 to locate the
15 shelves in place. Such shelves are useful for the support
of bottles, glasses and other equipment which requires to
be used behind a bar or counter. The shelves are
preferably located on the support beams solely by the
engagement of the aforementioned flanges with the beams.
20 The shelves may then be easily slid from the beams for
cleaning or replacement.

Some of the uppermost support beams 14 support a
drainer unit 22 which is also pressed from stainless steel
and comprises a dished upper surface for retaining
25 spillages. The drainer unit 22 has a rear downwardly
turned flange 23 which hooks over the free ends of the
uppermost support beams 14, and a front upwardly turned
flange 24. In this case the flange 24 is spaced

rearwardly of the posts 10 so as to provide a horizontal space or duct 25 through which may pass piping for beverages and liquids, as well as electrical cables and indeed any conduit which requires to extend along the counter system. Removable access panels may be provided at intervals along the length of the duct 25.

Between one pair of adjacent uppermost support beams 14 there is mounted a sink unit, as indicated at 26 in Figures 1 and 3, and between another pair of uppermost support members 14 is mounted an ice chest as indicated at 27 in Figures 2 and 3. Further fitments may be supported on the extremities of the cantilever support beams such as a double speed rail 28 and/or a shelf unit 29 for a blender or similar piece of equipment.

Conventional fonts for beer or other beverages may be mounted on the countertop 16 in required locations, one of such fonts being indicated at 30. The conduits leading to the fonts pass through the ducts 25.

Other optional features of the counter and shelving system may be seen from Figure 3. For example, a bottle skip 31 may be mounted between two of the support beams 14 under the drainer unit 22, a hole 32 being provided in the drainer unit through which empty bottles may be passed into the skip 31.

Vertical ducts 33 may be provided at intervals along the system to receive conduits passing along the horizontal duct 25, and removable access panels may be provided on the vertical ducts. There may conveniently be

mounted adjacent each duct 33 a catchment container 34 for bottle caps.

It will be appreciated that the particular arrangement shown in the drawings is by way of example only, and the spacing of the support units and the mounting of the surfaces and equipment thereon may readily be adapted according to the particular requirements of the user.

Figure 4 shows a modified arrangement which is in many respects similar to the arrangement of Figures 1 to 3 and similar components therefore carry similar reference numerals. However, the arrangement of Figure 4 differs in that each post 11 has a shorter cantilever support beam 35 welded to the upper end thereof to provide additional support for the countertop 16. Figure 4 also shows the drainage conduit 36 from the drip rail 17. In this arrangement the adjustable support leg 15 is spaced from the kickplate 15a, which is separately supported.

CLAIMS

1. A counter and shelving system comprising two or more spaced parallel posts each having means at its lower end for supporting it in an upright position on the floor,
5 a plurality of support beams spaced one above another along the height of each post, each support beam being secured at one end to the post and extending away from the post in cantilever fashion, each support beam on one post being at the same height as a corresponding support beam
10 on an adjacent post, and one or more shelf structures being provided each of which extends between a pair of corresponding cantilever support beams and is supported thereby.
2. A system according to Claim 1, wherein the means
15 for supporting each post includes a device for securing it rigidly to the floor.
3. A system according to Claim 1 or Claim 2, wherein the supporting means includes a supporting leg extending downwardly to the floor from a position adjacent
20 the free extremity of the lowermost support beam on the post.
4. A system according to any of Claims 1 to 3, wherein the posts and support beams are formed from stainless steel.
- 25 5. A system according to any of Claims 1 to 4, wherein the ends of the support beams are secured to the support posts by welding.
6. A system according to any of Claims 1 to 5,

wherein one or more of the shelf structures are pressed from sheet metal.

7. A system according to Claim 6, wherein one or more of the shelf structures comprise an upper surface and
5 downwardly turned end flanges which hook over the support beams.

8. A system according to Claim 7, wherein the shelf structure also includes a downwardly turned front flange along the side of the shelf structure remote from the
10 posts, and/or an upwardly turned rear flange along the side thereof nearer the posts.

9. A system according to Claim 8, wherein a rear flange is spaced from the posts to provide a space for the location of conduits, electric cables or the like.

15 10. A system according to any of Claims 1 to 9, wherein the shelf structures incorporate a sink or ice compartment.

11. A system according to any of Claims 1 to 10, further incorporating a countertop supported on the tops
20 of the posts and/or on cantilever support beams mounted at the upper ends of the posts.

12. A system according to Claim 11, wherein one or more fonts for dispensing beverages are mounted on the countertop.

25 13. A system according to Claim 11 or Claim 12, wherein the countertop incorporates a drip tray.

14. A system according to any of Claims 1 to 13, and including facing panelling extending across and between

the posts on the opposite side thereof to the cantilever support beams.

15. A counter and shelving system constructed and arranged substantially as hereinbefore described with
5 reference to any of the accompanying drawings.

Patents Act 1977**Examiner's report to the Comptroller under
Section 17 (The Search Report)**

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Application number

9116507.6

Relevant Technical fields

(i) UK Cl (Edition K) A4B

(ii) Int Cl (Edition 5) A47B

Search Examiner

M J PENNELL

Databases (see over)

(i) UK Patent Office

(ii)

Date of Search

14 AUGUST 1992

Documents considered relevant following a search in respect of claims

1-15

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	GB 2214413 A (CONSTANTINE)	At least 1
X	GB 1023074 (SHELL)	At least 1
X	US 3527353 (FARREN)	At least 1

Category	Identity of document and relevant passages	Relevance to claim(s)

Categories of documents

X: Document indicating lack of novelty or of inventive step.

Y: Document indicating lack of inventive step if combined with one or more other documents of the same category.

A: Document indicating technological background and/or state of the art.

P: Document published on or after the declared priority date but before the filing date of the present application.

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